

### **Remarks**

Applicants appreciate the thorough examination of the present application as evidenced by the Office Action dated January 5, 2004 (hereinafter, "the Office Action") and a subsequent Interview Summary dated March 8, 2004. Claims 1-3 and 5-9 are pending in the present application. Claims 1-3 and 5-8 stand rejected under 35 U.S.C. § 102. Claim 9 stands objected to as being dependent on a rejected base claim. Applicants address below the issues presented in the Office Action as well as provide a Statement of the Substance of the Interview.

#### **I. Statement of the Substance of the Interview**

Applicants appreciate the opportunity afforded to one of the inventors, Dr. Paul V. Phibbs, Director of Office of Technology Transfer at East Carolina University, Ms. Martha Van Scott and Applicants' representative, Shawna Cannon Lemon, to speak with the Examiner, Terra C. Gibbs, and Primary Examiner, Dr. Karen LaCourciere, during a telephonic interview on March 1, 2004. During the telephonic interview, Dr. Phibbs discussed the Smyth et al. reference which is cited against claims 1-3 and 5-8 in a rejection under 35 U.S.C. § 102(b). As correctly noted by the Examiner in the Interview Summary, Dr. Phibbs noted that Smyth et al. does not discuss the catabolite repression control (Crc) gene. As further noted by the Examiner, Dr. Phibbs also noted that Smyth et al. does not discuss the global regulatory effects of virulence and pathogenesis. Dr. Phibbs also discussed the failure of the literature to present a correlation between virulence and the Crc protein in an animal model as presented by the present inventors. Dr. Phibbs further discussed that catabolite repression mutations described by Smyth et al. were located in amidase operon regulatory genes while the present method is designed specifically to eliminate consideration of direct effects on amidase operon genes. For at least these reasons, the Examiner and Dr. Karen LaCourciere suggested that Applicants incorporate into the claims recitations directed to the Crc gene and specific test compounds that inhibit the virulence of *Pseudomonas* bacteria to overcome the rejection under 35 U.S.C. § 102(b) in view of Smyth et al.

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Applicants have amended claim 1 to incorporate language directed to a role of Crc in embodiments of the present invention as discussed in further detail below. Accordingly, Applicants respectfully request reversal of the rejection under 35 U.S.C. § 102(b) in view of Smyth et al. and allowance of the present application.

**II. Declaration Under 37 C.F.R. § 1.131**

Applicants appreciate the indication that Applicants' Declaration Under 37 C.F.R. § 1.131 submitted on December 15, 2003 has been considered and found persuasive.

**III. Claim Rejections**

**A. Previous Claim Rejections**

Applicants appreciate the indication that the previous rejection of claims 1, 2, 3, 8 and 9 under 35 U.S.C. § 102(a) as being anticipated by O'Toole et al. has been withdrawn.

Applicants appreciate the indication that the previous rejection of claims 1, 2, 3, 8 and 9 under 35 U.S.C. § 103(a) as being anticipated by Wolf et al. in view of O'Toole et al. has been withdrawn.

Applicants further appreciate the indication that the objection against claims 5, 6 and 7 has been withdrawn.

**B. Claim Rejections in the Current Office Action**

Claims 1-3 and 5-8 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Smyth et al. More specifically, the Office Action states the following:

[T]he claimed method, as recited, has only 3 steps— providing culture media comprising *Pseudomonas* bacteria, an amidase operon repressor, and fluoroacetamide; adding a test compound; and detecting poisoning of said bacteria. Smyth et al. recites all of these steps and therefore Smyth et al. anticipate the instant invention.

Office Action, page 4, third paragraph.

Applicants have amended claim 1 to recite that the amidase operon is a "catabolite repression control (Crc) protein-mediated amidase operon repressor" as suggested by the

Examiner. Support for this amendment can be found in the specification, for example, on page 6, line 10. Applicants have amended claim 9 to recite that the test compound is selected from the group consisting of small organic compounds and oligomers, and combinations thereof. Support for this amendment can be found in the specification, for example, on page 5, lines 1-22. Applicants have also added new claim 16. Claim 16 represents originally presented claim 1. As noted above, Smyth et al. does not discuss the catabolite repression control (Crc) gene and does not discuss the global regulatory effects of the Crc gene on virulence and pathogenesis. Consequently, Applicants respectfully submit that amended claim 1, and claims dependent therefrom, are not anticipated by Smyth et al. under 35 U.S.C. § 102(b). Additionally, Applicants respectfully submit that in light of the points raised by Dr. Phibbs during the telephonic interview, new claim 16 is not anticipated by Smyth et al. under 35 U.S.C. § 102(b).

Accordingly, Applicants respectfully submit that claims 1-3 and 5-8 and new claim 16 are not anticipated by Smyth et al. under 35 U.S.C. § 102(b), and respectfully request that this rejection be withdrawn. Additionally, Applicants respectfully request that the objection to claim 9 as being dependent on a rejected base claim be withdrawn.

#### **IV. Conclusion**

In view of the foregoing amendments and remarks, Applicants respectfully request that all outstanding rejections and objections to the claims be withdrawn and that a Notice of Allowance be issued in due course. The Examiner is invited and encouraged to contact the undersigned directly if such contact will expedite the prosecution of the pending claims to issue. In any event, any questions that the Examiner may have should be directed to the undersigned, who may be reached at (919) 854-1400.

It is not believed that any fee(s), including fees for additional claims, are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event, however, that additional fees are necessary to allow consideration of this paper, such an extension is also hereby petitioned for under 37 C.F.R. §1.136(a). Any additional

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fees believed to be due in connection with this paper may be charged to our Deposit Account No. 50-0220.

Respectfully submitted,



Shawna Cannon Lemon  
Registration No. 53,888

**USPTO Customer No. 20792**  
Myers Bigel Sibley & Sajovec, P.A.  
P. O. Box 37428  
Raleigh, North Carolina 27627  
Telephone: (919) 854-1400  
Facsimile: (919) 854-1401

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Susan E. Freedman  
Date of Signature: May 5, 2004